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ABSTRACT

Guidelines and implementation options for a program to evaluate the outcomes of collegiate education in New Jersey are discussed. A good program must seek to: (1) maintain public confidence; (2) nuture institutional autonomy and individual diversity; and (3) stimulate educational excellence. College outcomes that the program should cover are: student performance as a measure of individual achievement and as an institutional outcome; community-based institutional outcomes; and society-wide institutional outcomes. In addition, information systems may need to be redesigned to report the results of outcomes assessments in ways that can enhance learning and improve programs, the college environment, and institutional performance. Appended is a staff memorandum excerpt that addresses the following topics: course examinations and comprehensive examinations in the major field of study, including the issues of what can be accurately measured through normal testing and the dangers of testing what can be readily measured; assessment of academic proficiencies at the sophomore level; teaching and evaluation of critical thinking and problem-solving skills; assessment of students' progress toward a degree; assessment of postgraduation activity; and reporting on student performance. Also appended is a resolution of the State Board of Higher Education's actions concerning the college outcomes evaluation program. (SW)

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COLLEGE OUTCOMES EVALUATION PROGRAM

T. EDWARD HOLLANDER

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STATE OF NEW JERSEY
DEPARTMENT OF HIGHER EDUCATION
TRENTON, NEW JERSEY 08625

OFFICE OF THE CHANCELLOR

MEMORANDUM

May 17, 1985

TO: Board of Higher Education
Academic Affairs Committee

FROM: Chancellor T. Edward Hollander

SUBJECT: College Outcomes Evaluation Program

INTRODUCTION

At the Board's retreat of March 15, we exchanged ideas on the development of a comprehensive program to evaluate the outcomes of higher education. It was agreed then that the concept of such a program has merit and that the next step should be the presentation of a proposal for your consideration. The purpose of this memorandum is to outline the principles, guidelines, and course of action I believe we should follow in developing such a program, if you and the Board concur.

By contributing state resources to strengthen existing practices and develop new initiatives in the evaluation of outcomes, the program would fulfill two broad goals. First, it would further stimulate efforts by faculties, administrators, and students to evaluate and enhance curricula, student learning, and overall institutional performance. Secondly, it would produce sound and reliable data addressed to the concerns and demands of the public with respect to the integrity of degrees and the value of collegiate education. The program should achieve its aims through a combination of campus-based evaluation activities, facilitated by incentives and guidelines, and centrally-administered evaluation activities and support services.

Both in its aims and preliminary outline, this evaluation program is responsive to issues raised and recommendations made in the recent National Institute of Education Report, "Involvement in Learning." For this reason I believe it is soundly grounded. Because its implications are potentially far-reaching, however, I believe it only prudent to proceed with care. The program will succeed only if we are sensitive to the diversity of the community it will serve and if a multitude of conceptual issues can be resolved. Therefore, it is

my sense that we should begin by appointing an advisory committee to study the design and implementation of the program preliminarily outlined below, and I seek your concurrence in recommending this course of action to the Board.

PRINCIPLES

Assessment is an essential component of student learning and of all institutional activities. It serves to clarify and clearly articulate goals and standards of performance, attest to the degree to which these goals are met, and, through proper feedback, enhance performance. Assessment is also, of necessity, a means to judge competence and distribute rewards. A certain degree of tension is inherent to the process. This fact must be recognized from the outset and its implications addressed if we are to establish a sound program. Our initiative should be so structured as to evoke the requisite involvement and cooperation and minimize the defensiveness associated with what may be viewed as external intrusions into the educational process.

The three principles that follow give distinct expression to each aspect of this tension. Together, they should assist the advisory committee in carefully weighing the potentially conflicting requirements of the program.

1. Maintaining Public Confidence

The program should provide a clear demonstration of the contributions higher education makes to students and to other relevant groups and communities. This goal has value in itself, but becomes essential in a period when the worth of collegiate education and institutions, both to individuals and to the society that supports them, is questioned. Thus the program should yield some objective measurements of individual and institutional performance with reference to clearly defined and publicly articulated criteria.

2. Nurturing Institutional Autonomy and Individual Diversity

Our institutions serve diverse populations and have necessarily disparate missions. Within institutions, programs and fields of study have developed unique characteristics that reflect the varied educational philosophies and interests of faculty and students. The attendant diversity is not a nuisance to be tolerated but a virtue to be cherished. The program should be designed and utilized in ways which preserve and nurture institutional and programmatic diversity.

3. Stimulating Educational Excellence

The requirements of objectively demonstrating student and institutional achievements and nurturing diversity set the boundaries to the program but should not comprise its essence. Sound educational considerations should ultimately provide the basis for all aspects of the program. The program should yield benefits to individual students, contribute to the soundness of undergraduate degrees and curricula, and help faculty and administrators define the priorities of, and induce improvements in, student and institutional performance.

GUIDELINES

Whereas the principles outlined above establish general parameters for the program, the guidelines that follow should inform the advisory committee's specific recommendations. These guidelines proceèd in part from the report of the Joint Task Force on Pre-College Preparation, and partly from informal discussions with members of the academic community and the Board itself. One specific issue that has been raised by some of our institutions, and that is to be addressed by the program, is the need for reliable data on the effectiveness of undergraduate curricula.

1. Content and Measurement

a. The intellectual development of individual students is the primary function of all institutions of higher education. Thus improving the content and reliability of information in this area, on an individual basis, should be a central task of the program. This task will require a combination of new and existing instruments of assessment. The information so gained should be used to evaluate student performance, to assist students in improving their skills, to guide their choices of academic programs and careers, to inform curriculum and program design, and to strengthen public confidence in students' attainments.

b. A second task of the program should be to produce reliable data on aggregate institutional outcomes in areas identified by the institutions as relevant to their missions and their special circumstances. This involves evaluation of the impact institutions have on their students as a group, on community-based groups and institutions, and society-wide

groups and institutions.[1] The information so gained could be used to inform institutional planning as well as provide evidence of and create support for institutional contributions beyond the formal instruction of students.

c. In order to determine the contributions institutions make, the concept of measuring "value added" should be applied wherever possible. This will require the ability to describe differences in performance before and after institutional intervention and at intermediate intervals.

2. Standards

In determining the standards to be used in evaluating results, all concerned should be guided by two objectives. The first is to define acceptable levels of performance by both students and institutions. The second is to induce students and institutions to improve their performance, either in absolute terms or with respect to statewide and national norms.

3. Locus of Responsibility

The program's dual purposes (see page 1) will require the evaluation of both individual students and aggregate institutional outcomes. The Department of Higher Education and individual institutions should bear differing responsibilities with respect to the varied aspects of the program. The experience of the Basic Skills Program has taught us that the broad involvement of the academic community, combined with resources, can yield substantial results.

a. While lines of demarcation cannot be neatly drawn, the enhancement of student learning and institutional performance is best pursued through initiatives which are primarily campus-based and supported, as necessary, by state-based guidelines and incentives. The requirement to maintain public confidence is best met by a combination of centrally-developed and locally-developed measures.

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[1] Community-based "outcomes" refer to the impact of the institution on all relevant locally-based constituencies. These may include the local business community, local policy-making bodies, adult education participants, etc. Society-wide "outcomes" refer to the impact of institutional activities which transcend the local community, such as effects on the scholarly and research community, federal and state governments, etc. In both cases, identification of appropriate outcomes depends on the mission and special circumstances of each institution.

b. With reference to the individual performance of students, the Department's role should be to assist institutions in evaluating levels of achievement and to recommend to the Board policies designed to improve these levels where necessary. To do this effectively will require a combination of centrally developed and locally developed instruments.

c. With reference to institutional outcomes, the Department's role should be to enlist the input of all institutions in devising a matrix of possible outcomes from which individual institutions would then select the most appropriate ones, and to monitor and evaluate the health of institutions and the New Jersey higher education system as a whole. For some purposes, standardized instruments should be used in order to insure comparability.

4. Confidentiality

Institutions and the Department should use the data and other information gained through the program in ways which conform to its intent, as defined by the Board of Higher Education, and to established practice. In the case of data on individual students' performance, the utmost concern for confidentiality should govern access to the data, as required by the provisions of the Buckley Amendment (20 U.S.C. Section 1232g).[1] Further, the results of statewide tests given for purposes of individual placement and advising should not become a part of students' transcripts.

5. Costs

Other than stating, as a matter of principle, that the program should be sensitive to the requirements of cost effectiveness, it is difficult to estimate actual costs with any degree of precision at this early stage. With respect to a centrally-designed test battery, if we use as a guide our experience with the New Jersey College Basic Skills Placement Test, costs might fall within a range of $1,000,000 to $1,500,000 for development and first-year implementation. Other forms of evaluation and data analysis might incur additional costs of equal magnitude. The State, through the Department, should properly bear the costs for those aspects of the program which are centrally controlled and mandated.

Financial incentives hold considerable promise for stimulating improvements in institutional performance and encouraging institutional involvement and cooperation in all aspects of the program. The Department should make full use of this policy option to ensure the program's success.

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1 This is the federal law which protects students' rights to insist that their educational records be confidential.

IMPLEMENTATION OPTIONS

Beyond these general principles and guidelines a host of specific issues should be resolved before the program can be instituted. Many of these are outlined in a staff memorandum entitled "An Agenda for Educational Excellence," which was among the materials discussed at the Board's March retreat. Rather than repeat those points, I refer you to Attachment I.

1. Options for Development of Performance Measures

The "outcomes" of higher education can be clustered in the following areas: (a) student performance, as a measure of individual achievement and as an institutional outcome; (b) community-based institutional outcomes; and (c) society-wide institutional outcomes. A comprehensive evaluation program should cover all three of these areas. In each case, it will be necessary to choose among a broad spectrum of possible indicators and to determine the appropriateness of each indicator selected with respect to the principles of maintaining public confidence, nurturing autonomy and diversity, and stimulating educational excellence.

Evaluation of intellectual development must be at the center of the effort to assess student performance. In this regard, an important distinction should be drawn between the acquisition of general college-level academic proficiencies and the acquisition of specific subject-matter knowledge. Attachment I (pages 7-10) discusses the advantages of evaluating the first through a sophomore-level statewide assessment program and the second through locally-developed means.

Another aspect of student performance, relevant for both individual and institutional evaluation, involves the "success" of students in pursuing a degree and the post-graduation activities for which higher education has prepared them. These may include "progress toward the degree," retention, pass rates on licensure exams, graduate education, employment. Of course, in evaluating performance in these areas, care must be taken to account for the effect of extra-institutional factors, such as student motivation and the state of the economy. Attachment I (pages 12-15) further discusses these issues.

The above comments suggest the following components in the area of student outcomes. Other components may also be appropriate, and may be added by the advisory committee. Some of these components should yield measurable and comparable data while others cannot do so and aim only to strengthen efforts for individual and institutional improvements:

-- a test battery that measures proficiencies in writing, quantitative reasoning, critical thinking,[1] and any other areas appropriate for the evaluation of general college-level academic proficiencies, to be taken toward the end of the sophomore year by all students. The same instruments should provide a measure of students' proficiencies in the basic skills compared to their proficiencies at college entrance, as originally measured by the New Jersey College Basic Skills Placement Test. The test battery may include some components common to all institutions and others specific to individual institutions or groups of institutions;

-- institutional development of specific graduation requirements, including satisfactory performance on comprehensive examinations to be taken before graduation in each major field of concentration;

-- development of measurements of progress toward the degree and post-graduation activity relevant to institutional assessment; particular attention should be paid to minority retention and graduation as a measure of institutional performance.

Beyond educating students, collegiate institutions provide significant benefits to other groups. Evaluation of these outcomes should be included in a comprehensive program. The range of possible community-based audiences depends on local circumstances. They might include employers, participants in adult education and cultural activities, local governments and policy making or advisory bodies, other educational institutions, social welfare agencies.

Society-wide outcomes include all the manifold ways in which the personnel and resources of institutions of higher education contribute to our society. The range of society-wide outcomes includes the discovery and development of new knowledge, the application of knowledge to solve technical and societal problems, and the preservation and interpretation of our diverse cultural heritage. The audiences affected by these outcomes include the scholarly and research community, policy makers, corporations, the artistic community, and the entire body politic.

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1 This category includes the ability to identify and propose ways of solving problems, the ability to draw reasonable conclusions from information, and other abilities such as those listed in Attachment I (pages 10-11).

The following process should be instituted in order to identify appropriate community-based and society-wide outcomes and the means to evaluate them:

-- establishment, at the state level, of a matrix and guidelines for the evaluation of these outcomes;

-- selection, at the local level, of appropriate outcomes and development of instruments and practices for their evaluation;

-- identification of models for the sound and objective evaluation of these outcomes and development of policies for their use on a systemwide basis.

2. Options for Feedback and Information Sharing

Information systems presently in use should be reviewed and, if necessary, redesigned so as to report the results of outcomes assessments in ways that can be used constructively. A redesigned system should collect and present data in ways that enhance learning and yield improvements in programs, institutional environment, and institutional performance. It should facilitate information sharing and articulation between receiving and sending institutions (see Attachment I, pages 14-15). Finally, it should yield information that is meaningful and accessible to the public and to organizations interested in higher education.

The Department's current data systems are confined to collection of institutional data in the aggregate. This has proved inadequate for studies of student outcomes such as retention and progress toward the degree. Data bearing on post-graduation activity have never been collected centrally. A unit record system, designed to provide information on individual student characteristics, persistence, transfer, and withdrawal, and supplemented by special surveys, would provide the data necessary for both information sharing and assessment. Such a record system would require standardized definitions and reporting formats.

RECOMMENDATIONS

1. A comprehensive program to evaluate the outcomes of collegiate education, however it may be finally implemented in detail, has the potential to contribute significantly to the achievement of educational excellence in New Jersey. I therefore ask you to recommend to the Board of Higher Education that it authorize the Chancellor to institute such a program.

2. In order to attain optimal results, the program requires the informed advice and participation of the academic community. So that it may proceed on a sound footing, I ask you to recommend that the Board appoint an advisory committee upon the Chancellor's nomination. The committee should be composed of knowledgeable individuals from all sectors of higher education in New Jersey and members of the public who can reflect the views of various constituencies of higher education such as business, government, and non-profit organizations. It should also include individuals who have the necessary technical expertise to evaluate and advise on all aspects of the program.

3. I ask that you recommend to the Board a charge to the committee that includes the specific areas of evaluation outlined above (pages 7-8). In each case, the committee should study the available options and report to me its recommendations on how best to institute a comprehensive system of evaluating the outcomes of higher education. The committee should further consider, in each case, the information systems required to facilitate data collection, feedback and information sharing, the incentives required to improve performance, where necessary, and the options for bearing the costs of the program.

CONCLUSION

I believe that this proposal for a comprehensive outcomes evaluation program is an essential component of our effort to enhance educational excellence in this state. It is in this spirit that I submit it for your consideration. The recommendation that the Board of Higher Education empanel an advisory committee is a necessary first step. If you agree on the soundness of the project, I request that you present this program, with a favorable recommendation, for the approval of the Board.

ATTACHMENT 1

EXCERPT FROM STAFF MEMORANDUM
"AN AGENDA FOR EDUCATIONAL EXCELLENCE"
FEBRUARY 28, 1985

III. Evaluation of Outcomes

Both the NIE report and the Task Force on Pre-College Preparation expressed the need for more and better information on what students are actually learning in college. Their recommendations were based on the premise that systematic assessment of performance is useful "as a tool for clarifying expectations and for increasing student involvement....." Your memorandum of November 16, 1984 outlined some of the potential difficulties and pitfalls of instituting an assessment system, but concluded that these considerations should not be taken as arguments against "the clear formulation of purposes and expectations, nor against thoughtful evaluation of students' performance."

A. Course Examinations and Comprehensive Examinations in the Major Field of Study

One aspect of "what students are actually learning in college" has to do with the knowledge and skills they gain from the individual courses they take and from the entire programs of study they pursue. In gross terms, one can distinguish between two important categories of learning: "generic proficiencies" and "specific knowledge."

The concept of standardized testing of subject-matter learned in specific disciplines at the college level, although attractive in its simplicity, is fraught with difficulties:

1. What is it that can be accurately measured?

The easiest variable to measure through normal testing methods is the acquisition and retention of particular facts and information considered fundamental to the field. Facts and information, however, are not the essence of what collegiate education has to offer. They are, of course, necessary raw materials, but they cannot be considered the desired product of the experience. Instead, the objective of sound undergraduate education is to develop students' understanding of the coherence and internal structure of a discipline and of the issues that constitute the substance of current work in the field, their ability to engage in the modes of thought and discourse used by its best practitioners, their appreciation of the complexity and beauty of structures in nature and society, and their aesthetic and moral sensibilities. Standardized tests simply cannot measure these profound dimensions of personal and intellectual growth.

2. What are the unintended side-effects?

One of the dangers of testing what can be readily measured is the tendency of teachers to help their students prepare for the tests. But to concentrate on teaching what can be (or is) measured using standardized tests would subvert much of what is best in collegiate education. In effect, it might produce "results" by trivializing the objectives.

Closely related to this concern is the danger that introduction of uniform tests of content in subject disciplines will lead to a standardization of curricula and a loss in the diversity of approach and opinion to which students are exposed. Standardization of content might be seen as a gain by those whose orthodoxy prevailed, but it would surely constitute a disincentive to originality and dissent, the dual responsibilities of the academic vocation at its best.

3. Is the information gained worth the price?

To achieve statistical accuracy in measuring any but the most trivial aspects of knowledge gained from college programs, if possible at all, would require either short-answer tests of great length or essay tests that would be exceedingly expensive to score in a reliable manner. The direct costs of developing and administering such an assessment program, when added to its potential for producing unwanted side-effects, make it unattractive if a better method can be found.

A better approach to the assessment of knowledge gained from collegiate programs of instruction is that recommended by the Task Force on Pre-College Preparation. It consisted of two parts:

- adoption of policies at each college requiring administration of cumulative tests and comprehensive final examinations in all appropriate courses;

- local development of program-specific graduation requirements by the faculty of each degree program, including comprehensive essay examinations in each major field of concentration on which students would be required to perform satisfactorily in order to qualify for the degree;

to which a third should be added:

- conduct of a systematic study of grading practices at each institution in order to identify and correct cases of "grade inflation" that would render meaningless the results of local testing systems.

B. Assessment of Academic Proficiencies at the Sophomore Level

In conjunction with the points just outlined, the Task Force on Pre-College Preparation also recommended:

- development and administration of a statewide test in writing and mathematics at the end of the sophomore year, a test which students would be required to pass in order to qualify for upper division courses.

Although there are inherent difficulties in constructing any standardized testing program, both substantive and political in nature, this recommendation could be implemented in a constructive manner. The difference between testing students' proficiencies in generic academic skills and testing their mastery of specific domains of knowledge lies precisely in the difference between an ability that has general applicability and the possession of specific information. The generic skills of verbal and mathematical literacy, of critical thinking and problem-solving, are the lingua franca of higher education, the basic tools of discourse that permit access to the realms of thought to which collegiate education provides a guide; they are common

to all intellectual endeavor. In contrast, the specific factual knowledge that accompanies understanding of a discipline can vary widely.

In designing an assessment of generic academic proficiencies, many issues of purpose and content will have to be considered and resolved. An essential ingredient will be the willingness of the community of institutions to participate in the design of the program and their confidence in the results.

To this end, the Department of Higher Education should empanel a commission of knowledgeable faculty members from all sectors of the higher education system to study alternative methods of assessing the verbal and quantitative proficiencies of college students toward the end of the sophomore year, and report to the Board of Higher Education on the feasibility of instituting such a program.

The implementation of any sophomore level assessment system should proceed in close coordination with the steps to be taken by the Department and Board of Education toward instituting a high school graduation test at the eleventh grade level.

C. Teaching and Evaluation of "Critical Thinking" and "Problem-Solving" Skills

In recent years the Basic Skills Council has studied the data emanating from its testing program in order to identify instructional implications that could lead to improvement in students' proficiencies. On the basis of this analysis and the cumulative teaching experience of its members, the Council concluded that the development of students' "critical thinking" and "problem-solving" skills ought to be the principal underlying goal of educational programs at all levels.

By the term "critical thinking" the Council means such high order skills as the following:

- the ability to extract, record, and reorder relevant information from reading material;
- the ability to draw inferences that go beyond the literal meaning of a text;
- the ability to distinguish fact from opinion, and the ability to evaluate and use factual evidence;

- the ability to construct a logically coherent argument and to present it in the form of expository writing (as opposed to pure narration, description, or expression of feelings);

- the ability to understand nuances of meaning and to apply them appropriately in order to draw fine distinctions;

- the ability to modify an opinion in the light of new evidence and argument.

By the term "problem-solving" the Council means such high order skills as these:

- the ability to understand what a problem consists of and what type of answer would constitute a solution;

- the ability to recognize that a proposed solution is nonsensical or of an inappropriate order of magnitude;

- the ability to translate a concrete problem into the abstract symbolic language of mathematics;

- the ability to bring appropriate problem-solving techniques to bear on new situations, i.e. the ability to go beyond the rote application of algorithms to stock problems;

- the ability to carry out calculations and algebraic manipulations requiring multiple steps and the use of techniques from more than one region of the mathematical realm.

To explore these ideas further, the Council established an advisory panel to which it gave the name "Task Force on Thinking." Invited to serve on it were faculty from an array of disciplines that bear on the question of teaching and learning critical thinking and problem-solving skills. As the organizing principle for its work, the group has formulated an agenda that can best be summarized in terms of four sets of questions:

1. What kinds of generic "thinking skills" should students have when they enter college? Are certain skills particularly important to academic success as

opposed to other kinds of human endeavor? Can one identify skills individually or in combination that are important in all or many content areas?

2. Which generic "thinking skills" do students typically possess upon college entry, and which do they typically lack?

3. What can be done to improve students' generic "thinking skills?" Which ones could be significantly improved through explicit instruction? At what ages are such skills taught most effectively, and by what methods? Should generic skills be taught through deliberate application within the traditional curricular subjects, or should they be taught explicitly and separately from the traditional curriculum?

4. What additional research on generic "thinking skills" should be undertaken?

When its work is complete (perhaps in another year), the Task Force hopes to make two kinds of recommendations: first, to indicate ways to enhance the development of students' critical thinking and problem-solving skills; and second, to identify promising techniques for the assessment of students' proficiencies in these skills.

D. Assessment of Students' Progress Toward a Degree

A less direct, but equally important, set of outcome indicators would measure various aspects of students' progress toward earning a degree. Whereas direct assessments of knowledge and skills proficiencies describe the intellectual progress of individuals and groups of students, such indicators as institutional retention rates, credits attempted and credits earned by students, and their grade point averages describe students' progress toward earning the credential that they will present to the world at large as an affirmation of their educational achievement.

No less than testing and the use of test results, the creation and interpretation of information on progress toward a degree requires a subtle understanding of the complexities that contribute to a particular measurable outcome.

No comprehensive study on retention in New Jersey's colleges and universities has ever been conducted by the Department of Higher Education, though some individual institutions have analyzed their own experience of attrition and retention. The principal conceptual obstacle to a systemwide study that will yield a reasonably accurate picture is the difficulty of collecting data that reflect the essential distinctions among various kinds of attrition, some of which may actually indicate success rather than failure, and some of which may be entirely neutral. The effort must be made, therefore, to think through the maze of possibilities, and to analyze how much of the gross attrition rate is undesirable.

Measures of students' behavior such as credits attempted, credits earned, and grade point averages are simpler to handle than retention because they do not depend so directly on the ability to collect data on motivations and intentions that are difficult to quantify. Nevertheless, since grading philosophies and standards vary greatly among institutions, and since grades are closely related to definitions of credits earned, data from different institutions are exceedingly difficult to interpret outside the local context.

Despite the difficulties of measurement, progress toward a degree is a fundamental outcome that is amenable to study and that should be better understood. The Department should, therefore, consult with the institutions in New Jersey on the conceptual structure of a meaningful study and methods of collecting the necessary information. An important source of guidance with respect to such an effort would be the National Center for Education Statistics, which is planning a longitudinal study of persistence, transfer, withdrawal, student characteristics, and academic performance; the initial collection of data is proposed for 1988.

E. Assessment of Post-Graduation Activity

Whether or not a student's education leads to further "opportunities" and "success in life" is perhaps the ultimate measure of outcomes. The profound questions suggested by a liberal interpretation of "opportunity" and "success" are, obviously, innumerable; they could lead to a rich variety of sociological studies. For the immediate purpose of assessment, however, it is only realistic to limit the scope of inquiry to those effects that can be measured by colleges and universities and the incidence of which can be inferred to have a causal connection to educational programs. Two measures of such effects are the

degree to which students pursue further education or successfully enter upon the initial stage of a career after completing their degree programs. The latter may, in turn, be broken down into the categories of career placement (employment) and successful passing of professional licensing examinations.

As always, the collection of accurate information about these categories of behavior is difficult. Causal relationships may seem self-evident but often turn out to be tenuous. Methodologies vary, but they all run into the difficulty of winning the cooperation and participation of former students in all the categories needed to present a representative description of post-graduation activities. And due consideration must be given to the widely varying missions of different institutions and purposes of individual programs in designing an assessment of outcomes.

Once again, however, information about these relationships is essential to any overall understanding of the contributions higher education makes both to individual students and to the society at large. The Department should, therefore, work with the colleges and universities to develop a system of surveying a representative sample of college graduates (at all degree levels) regarding their subsequent activities. Such a system might well be based upon the various questionnaires currently in use. A complementary analytical framework should be devised in such a way that relationships among a multitude of variables can be described and that reports can reflect the diversity of behaviors evident in the choices people actually make.

F. Reporting on Student Performance

The information generated from any new assessment program must be organized and disseminated to appropriate users in order to maximize its effect. Information need not be new, however, to be useful. Much of the information that already exists about students' performance could be put to better use if it were properly analyzed and distributed. An instructive example is the system of reporting the scores earned by entering college students on the Basic Skills Test to the high schools from which they graduated. Much other information that is presently available on students' grades and progress toward successful completion of programs could be shared in a similar way with institutions that have an interest in the subsequent performance of their students.

The Department of Higher Education should plan a program of information exchange at two levels:

- colleges should make available to sending high schools not only students' Basic Skills Test results but also detailed information on their performance through the first two years of college.

- likewise, four-year colleges should provide sending two-year institutions detailed information on the performance of their transfer students.

The precise nature of the data and the format of the reports that would be most useful should be decided by committees composed of equal representatives of the two types of institutions involved in each case.

Such an information exchange program could have several positive outcomes. It would undoubtedly stimulate dialogue and understanding among the constituencies. It could also lead to better articulation of instruction across institutional levels where the system should offer continuity rather than create barriers. And it could contribute to the assessment of program effectiveness.

STATE OF NEW JERSEY
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MEMORANDUM

June 12, 1985

TO: Members, Board of Higher Education

FROM: Martin Freedman, Chairman
Academic Affairs Committee

SUBJECT: College Outcomes Evaluation Program

The Academic Affairs Committee met on May 28 to consider a college outcomes evaluation program, as outlined in the attached memorandum of May 17 from Chancellor Hollander. We agreed that it represents a timely and well-conceived initiative, and forward it for the Board's consideration with our full support. A resolution for the Board's action is attached.

The proposed program, which is to be thoroughly studied by an advisory committee, would create a comprehensive system for evaluating the effectiveness of institutions of higher education in the state. The elements selected for evaluation fall into the areas of students' progress and post-graduation activities, and institutions' impact on the surrounding community and the broader society. The testing of students in the sophomore year of college for college-level academic proficiencies is an essential component of the program. In this case the advisory committee will be charged to recommend the content, design, and mode of implementing the assessment. The other elements outlined seem necessary for a sound and comprehensive evaluation; in these cases the committee will be asked to study the feasibility of each element as well as recommend a preferred mode of evaluation and implementation. The committee will, of course, be at liberty to recommend additional elements to the program. Wisely, there will be room for institutional discretion in the selection of some of the "outcomes" to be evaluated, instruments to be utilized, and utilization of the data produced by the program.

The focus on "outcomes" is an interesting approach, as it directs attention to the central question of what the institutions actually accomplish through their various activities. This is to be done, whenever feasible, by measuring "value added," or the difference that an institution's intervention has made. Thus the information generated by the program would convey a sense of improvement in performance as well as absolute levels of achievement. As we know, this is especially important given the diversity of student bodies in New Jersey's institutions. A major purpose of the program will be to support institutional efforts toward excellence within the context of each institution's mission and goals.

Overall, we believe that the program as proposed meets the concerns of the institutions, the Chancellor, and the Board, for furthering educational excellence and demonstrating the value of collegiate education and institutions. The Committee strongly urges you to approve this initiative by adopting the attached resolution.

Attachment

STATE OF NEW JERSEY

STATE BOARD OF HIGHER EDUCATION

A RESOLUTION ESTABLISHING AN ADVISORY COMMITTEE TO RECOMMEND THE DESIGN AND MODE OF IMPLEMENTATION OF A COMPREHENSIVE COLLEGE OUTCOMES EVALUATION PROGRAM

WHEREAS: The Board of Higher Education wishes to maintain public confidence in, and ensure continued support and funding for, the New Jersey system of higher education by demonstrating the value of its programs; and

WHEREAS: The Board has discussed, and at its meeting on March 15, 1985, expressed interest in the development of a comprehensive program to measure outcomes of higher education; and

WHEREAS: The Joint Statewide Task Force on Pre-College Preparation recommended the development of selected student outcome measures, including a statewide test battery for college sophomores, and the development of specific graduation requirements; and

WHEREAS: The Board, in its resolution of March 16, 1984, requested all institutions to review the Task Force's recommendation that a statewide test in verbal proficiencies be given to all students at the conclusion of the sophomore year in college; and

WHEREAS: Several national commissions and organizations including the Association of American Colleges, in its report "Integrity in the College Curriculum," and the National Institute of Education, in its report "Involvement in Learning," have recommended the development of sound evaluation programs, both to maintain public confidence and to stimulate curricular improvements; and

WHEREAS: The Board wishes to explore the development of a comprehensive evaluation program which is consistent with the joint principles of maintaining public confidence, nurturing institutional autonomy and individual diversity, and stimulating educational excellence; now, therefore be it

RESOLVED: That the Board of Higher Education supports the efforts of the colleges and universities to maintain public confidence and high standards of learning and performance; and be it further

RESOLVED: That the Board of Higher Education agrees that a comprehensive program to evaluate the outcomes of higher education can contribute to educational excellence in New Jersey and authorizes the Chancellor to proceed with instituting such a program; and be it further

RESOLVED: That an advisory committee, composed of students, faculty and administrators with the requisite knowledge and expertise from all sectors of higher education in New Jersey, and members of the public who reflect the views of various constituencies of higher education, such as business, government, and nonprofit organizations, be appointed by the Board upon the Chancellor's nomination; and be it further

RESOLVED: That the said advisory committee be charged to study options and report to the Chancellor its recommendations on how best to design and institute a comprehensive system of evaluating the outcomes of higher education; and be it further

RESOLVED: That the evaluation system shall include an assessment of students' learning through the administration of a test battery that measures proficiencies in writing, quantitative reasoning, critical thinking, and any other areas appropriate for the evaluation of general college-level academic proficiencies. The tests are to be taken toward the end of the sophomore year by all students attending public colleges and universities in New Jersey, and by students attending independent colleges and universities that choose to participate. The test

battery shall be constructed so as to include the capacity to measure students' proficiencies in the basic skills after two years of college and to permit comparison with their basic skills proficiencies at college entrance as originally measured by the New Jersey College Basic Skills Placement Test. The test battery may include some components common to all institutions and others specific to individual institutions or groups of institutions; and be it further

RESOLVED: That the said advisory committee be charged further:

1. To consider the feasibility, design, and implementation of the following potential components of the outcomes evaluation system. In addition to the specific elements outlined below, the committee may recommend other elements as deemed appropriate and feasible.

   Student outcomes:

   -- institutional development of specific graduation requirements, including satisfactory performance on comprehensive examinations to be taken before graduation in each major field of concentration;

   -- development of measurements of progress toward the degree and post-graduation activities relevant to institutional assessment; particular attention should be paid to minority retention and graduation as a measure of institutional performance.

   Community-based/society-wide outcomes:

   -- establishment, at the state level, of a matrix and guidelines for the evaluation of these outcomes;

   -- selection, at the local level, of appropriate outcomes and development of instruments and practices for their evaluation;

-- identification of models for the sound and objective evaluation of these outcomes and development of policies for their use on a system-wide basis.

Feedback and information sharing:

-- review of information systems presently in use and, if necessary, redesign so as to report the results of outcomes assessments in ways that can be used constructively;

-- implementation of a unit record system with standardized definitions and reporting formats.

2. To recommend ways of implementing the program, with specific reference to methods of evaluating various distinct outcomes and identification of those elements that should be centralized and those that should be designed and administered at the institutional level.

3. To recommend ways of utilizing incentives to improve performance.

4. To recommend an appropriate distribution of the costs of the program.

June 21, 1985